

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) An etching method for etching an organic etching target film ~~formed on an SiO₂ film placed inside an airtight processing chamber~~, the method comprising:

forming the organic etching target film on a protective film placed inside an airtight processing chamber, the organic etching film containing Si;

introducing a processing gas into ~~[[said]]~~ the airtight processing chamber, ~~wherein said~~ the processing gas ~~contains~~ containing N₂ and at least one of C₄F₈ and CF₄;

generating a plasma in ~~[[said]]~~ the airtight processing chamber for etching ~~[[said]]~~ the organic etching target film~~[[,]]~~₁; and

~~etching an organic target film containing Si formed on the SiO₂~~ the organic etching target film to the point until the [[SiO₂]] protective film is exposed,

wherein a resist layer is used as a mask on ~~[[said]]~~ the organic etching target film₁ ~~[[and]]~~

wherein the etching process ceases once the ~~[[SiO₂]]~~ protective film is exposed₁ and

wherein the processing gas has a selection ratio greater than approximately 2.0, the selection ratio defined by an etching rate of the organic etching target film divided by an etching rate of the resist layer.

2. (Currently amended) ~~[[An]]~~ The etching method according to claim 1, wherein ~~[[said]]~~ the organic etching target film ~~containing Si~~ is constituted of SiO₂ containing C and H.

3. (Currently amended) ~~[[An]]~~ The etching method according to claim 1, wherein ~~[[the]]~~ a dielectric constant of ~~[[said]]~~ the organic etching target film ~~containing Si~~ is equal to or lower than 3.0.

4. (Currently amended) ~~[[An]]~~ The etching method according to claim 1, wherein ~~[[said]]~~ the organic etching target film ~~containing Si~~ is an organic polysiloxane film.

5. (Currently amended) ~~[[An]]~~ The etching method according to claim 1, wherein ~~[[said]]~~ the processing gas further contains Ar.

6-13. (Canceled)

14. (Currently amended) An etching method for etching an organic etching target film ~~formed on an SiO₂ film placed inside an airtight processing chamber~~, the method comprising:

forming the organic etching target film on a protective film placed inside an airtight processing chamber, the organic etching film containing Si;

introducing a processing gas into ~~[[said]]~~ the airtight processing chamber,
~~wherein said the~~ processing gas ~~contains~~ containing at least CF₄ and N₂, ~~wherein the~~
~~flow rate ratio of CF₄ and N₂ in said processing gas is essentially set within a range of~~
 ~~$1 \leq (\text{N}_2 \text{ flow rate} / \text{CF}_4 \text{ flow rate}) \leq 4$;~~

generating a plasma in ~~[[said]]~~ the airtight processing chamber for etching ~~[[said]]~~
the organic etching target film~~[[,]]~~₁; and

etching ~~an organic~~ the organic etching target film ~~containing Si formed on the~~
~~SiO₂ film to the point~~ until the ~~[[SiO₂]]~~ protective film is exposed,

wherein a resist layer is used as a mask on ~~[[said]]~~ the organic etching target
film₁ ~~[[and]]~~

wherein the etching process ceases once the ~~[[SiO₂]]~~ protective film is exposed,
wherein a flow rate ratio of CF₄ and N₂ in the processing gas is set within a range
of $1 \leq (\text{N}_2 \text{ flow rate} / \text{CF}_4 \text{ flow rate}) \leq 4$.

15-17. (Canceled)